

portion of the body corresponds with the sternum of the vertebrata ; whereas in insects there is a complete inversion. This lower part to which the limbs are attached does not correspond with the sternum but with the back. Then the internal viscera should be viewed in this same relation ; they lie upon or are *above* the back, and are truly *epigastric* not *hypogastric*. When furnished with wings, if with two pair, the anterior proceed from the true thoracic arch, the posterior from the pelvic. In the turtle the three arches are beautifully seen ; the *pro-thoracic* in the jaw, then the *thoracic*, and finally the *meta-thoracic* or pelvic. In this group, as in some of the neighbouring ones, from the peculiar arrangement of the pelvic and other bones, the heel is turned forwards and the toes backwards. In fishes M. Geoffroy St. Hilaire attempted to establish an analogy between the bones of the operculum and the ossicula of the ear. But this is quite wrong : these bones are nothing more than a peculiar arrangement of the thoracic arch and fore-arm, as may be seen in the osseous arrangement, in its connexion with the respiratory function in the gills. The *Proteus* when viewed in its compound character presents no exception. Again, not a less common, though equally glaring mistake is made with regard to the pectoral fin and the deeper seated parts connected with it. Proceeding upon analogical considerations, the bones have been designated the scapular, proscapular, humerus, &c., whereas the true analogy of these parts is not with the shoulder but with the pelvic limb. As the osseous system, correctly contemplated, demonstrates this, so do the soft parts, and more especially the nerves, whether we look at the nerves of sensation or motion, or the *portio dura* of the 7th. The prothoracic arch, as already stated, is found in the jaw, and here the analogy is as conspicuous as elsewhere. On looking at the skeleton of the *Lophius* there appeared to be a contradiction, for here we find something so like a fin or hand, that it cannot fail to be taken for it ; but in seeking for it in the recent specimen it is not to be found ; in truth it is so rudimentary, that it never reaches, far less protrudes from, the skin. These are merely a few hints upon a very extensive and interesting subject, which the author would do well to illustrate in a more systematic and satisfactory manner than was possible in a short verbal communication.

ROYAL IRISH ACADEMY.

May 28, 1838.—Sir W. Hamilton, A.M., President, in the Chair.

Mr. Ball read a paper, by Wm. Thompson, V.P., Nat. Hist. Society of Belfast, "On the Irish Hare." (*Lepus Hibernicus*.)

This paper commenced with a review of what has been written on the subject of the Irish hare, from the time it was brought under the notice of English zoologists in 1833, until the present period. Mr. Thompson stated, contrary to what has been advanced, that the hare of England and Scotland, and that of Ireland, have long been known to differ; and that in 1807 the difference in the fur of the two species was alluded to as a matter of common notoriety, in the MS. of the late John Templeton, Esq. He further stated, that on account of their differing from the Irish species, a number of hares were, upwards of thirty years ago, brought from England and turned out on the largest of the Copeland Islands, off the county of Down; and that many years since, the Irish hare was, for a similar reason, introduced to the island of Islay, off the coast of Scotland.

The *Lepus Hibernicus* is considered distinct from all described species. It exhibits, in several respects, characters intermediate between the British hares, *L. timidus* and *L. variabilis*; but considered generally, more nearly approximates to the former animal.

The chief result of detailed measurements is shown in the superior length of the ears and tail of *L. timidus*, compared with those of *L. Hibernicus*. The former, or common hare, displays greater diversity of colour on the head, ears, and body, than the Irish species, which again exhibits greater variety in that of the legs. The most obvious difference in colour (and which has been unnoticed by authors,) is in the tail, the upper surface of which is black in the *L. timidus*, and white, tinged with greyish towards the base, in the Irish species. On looking to their osteology, some slight differences are observable in the head; the comparatively more horizontal direction of the lumbar vertebra in the Irish hare is conspicuous, and likewise the relative shortness of its tail, which, as first recorded by Mr. Eyton, contains three vertebræ less than that of the English species, thirteen only being possessed by the former, and sixteen by the latter animal.

The occasional whiteness of fur in the Irish hare is believed by the author to be a consequence of age, and not regulated by the law that is understood to affect the Alpine hare, which is considered to change its dark summer fur to white at the commencement of every winter.

The œconomy and habits of the Irish hare, which generally correspond with those of the common species, are, together with a comparative description of form, colour, &c., very fully detailed in this paper.